

# Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)

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*Installation of a capacitor bank  
for Project L-325A, A8 to A7 Substation Tipline*



*BC Controlled Area Roving Surveys  
Hand held surveys*



*Demolition of 607 Building*



*Removal of crate #4  
from 212 N Building*

## Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Central Plateau Remediation (CPR) (R. E. Wilkinson),
- Waste Sites Remediation (B. H. Ford), and
- Reliability Projects (R. G. Slocum).

NOTE: Unless otherwise noted, all information contained herein is as of the end of January 2007.

## Notable Accomplishments

### PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

#### Central Plateau D&D:

##### 200-UW-1 U Plant Zone Waste Site Remediation

- Finalized 241-U-361 settling tank core sampling bridging system requirements
  - No bridge will be needed to obtain samples
- 241-U-361 Tank Phase II Sampling and Analysis Plan (SAP) and Work Control Plan (WCP) were transmitted to Washington State Department of Ecology (Ecology) for final signature on February 12, 2007
- Obtained RL work prioritization for FY 2007 and FY 2008 due to changes in the Record of Decision (ROD)

##### 200 North Sites – Remove, Treat and Dispose (RTD)

- SAP approved by the U.S. Environmental Protection Agency (EPA) on January 17, 2007
- Remedial Action Work Plan transmitted to EPA for approval on February 20, 2007
  - Three comments received and being dispositioned
- Work Plans for characterization sampling complete
- Mobilization has commenced

#### U Plant

- Fate and Transport Modeling contract for the Waste Acceptance Study has been awarded
- Technical support contract for Cell 30 Vessel Contents Removal has been awarded
- Statement of Work for Grout Engineering Consulting Services for Canyon Void Fill and Grout Study has been issued

#### 212-N Facility

- Reinforced and retrieved two more crates (#9 and #4). Three out of 15 crates have been retrieved
- Inspected damaged crate #5
- Fabrication of the transportation containers for crate shipments has been awarded and is ahead of schedule
- Developed path forward to handle deteriorated conditions associated with crates

#### Deactivation and Decommissioning

- Completed demolition of ten miscellaneous structures

## Notable Accomplishments (continued)

### PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

#### Waste Sites Remediation :

- Completed Stakeholder/Hanford Advisory Board (HAB) workshops for the PW-1 Feasibility Study
- Completed collaborative data quality objective (DQO) with RL, EPA and Ecology for the supplemental Waste Site Characterization
- The UR-1 Project team safely completed 54 geophysical logs in the BC Controlled Area
- Downposting surveys in the BC Controlled Area have been completed for the southern portion of the site and are ~50 percent complete in the west area

#### Reliability Projects:

- Kickoff meetings were held for several projects:
  - L-429, *12-Inch Water Line Mortar Lining along 4th Street from Baltimore to Canton*
  - L-515, *Chip Seal from Route 4S between Wye Barricade and Route 11A*
  - L-612, *230kV Line Re-Armor*
  - L-615, *273E Renovations*, functional design criteria
- Completed the 712 Building Alternative Study on January 24, 2007
  - The two preferred options include renovating the 712 Building to meet standards and a build-to-suit lease agreement for a compliant facility

## FY 2007 Funds vs. Spend Forecast (\$M)

	Projected FY 2007 Funding	FY 2007 Fiscal Year Spend Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 69.3	\$ 66.5	\$ 2.9

## FY 2007 Schedule/Cost Performance (\$M)

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0040	Nuclear Facility D&D, Remainder of Hanford	\$16.1	\$14.2	\$13.5	-\$1.9	-11.9%	\$0.7	5.1%	\$66.8
<b>Total</b>		<b>\$16.1</b>	<b>\$14.2</b>	<b>\$13.5</b>	<b>-\$1.9</b>	<b>-11.9%</b>	<b>\$0.7</b>	<b>5.1%</b>	<b>\$66.8</b>

Numbers are rounded to the nearest \$0.1M.

### Schedule Performance (-\$1.9M/-11.9%):

The unfavorable schedule variance (SV) for Central Plateau D&D Project (CP D&D) (-\$1.2M) is due to delays in the ROD approval for 200-UW-1, U Zone Waste Site Remediation (-\$0.3M), which has caused further delays in barrier construction for the 216-U-8 and 216-U-12 cribs. Due to changes in the ROD approach, the baseline will be revised to include new work scope associated with the deep vadose zone characterization and treatability test, and defer 216-U-12 barrier.

Delays have been encountered in Surveillance and Maintenance (-\$0.5M) for corrective maintenance activities (e.g., B Plant/PUREX filter change outs, and REDOX/U Plant fan replacements) due to conflicting resources associated with 212N. Work is being resequenced. Materials are expected in March and this variance should correct by the end of the year.

Delays in demolition of 10 facilities (-\$0.3M) was the result of a loss of D&D workers. The facilities were completed in early February, and the schedule variance should be self-correcting.

The unfavorable SV in Waste Sites (-\$1.0M) is due to the following: (1) delays in collection and submission of Phase III samples /analysis, and data management resulting from prior delay in the issuance of the SAP (-\$0.2M), (2) BC Cribs work completed in prior years (-\$0.1M), (3) delays in SW-2 collaborative DQO which is taking longer than planned due to a large number of regulatory participants; resources focusing on DQO causing additional delays in other SW-2 scope (work plan, modeling, data management); passive vapor sampling now delayed until spring. (-\$0.5M), (4) delays in IS-1 pipeline mapping due to lack of resources (-\$0.1M), and (5) delays in engineering studies/miscellaneous (-\$0.1M).

The favorable SV for Reliability Projects (+\$0.3M) is within established thresholds.

### Cost Performance (+0.7M/+5.1%):

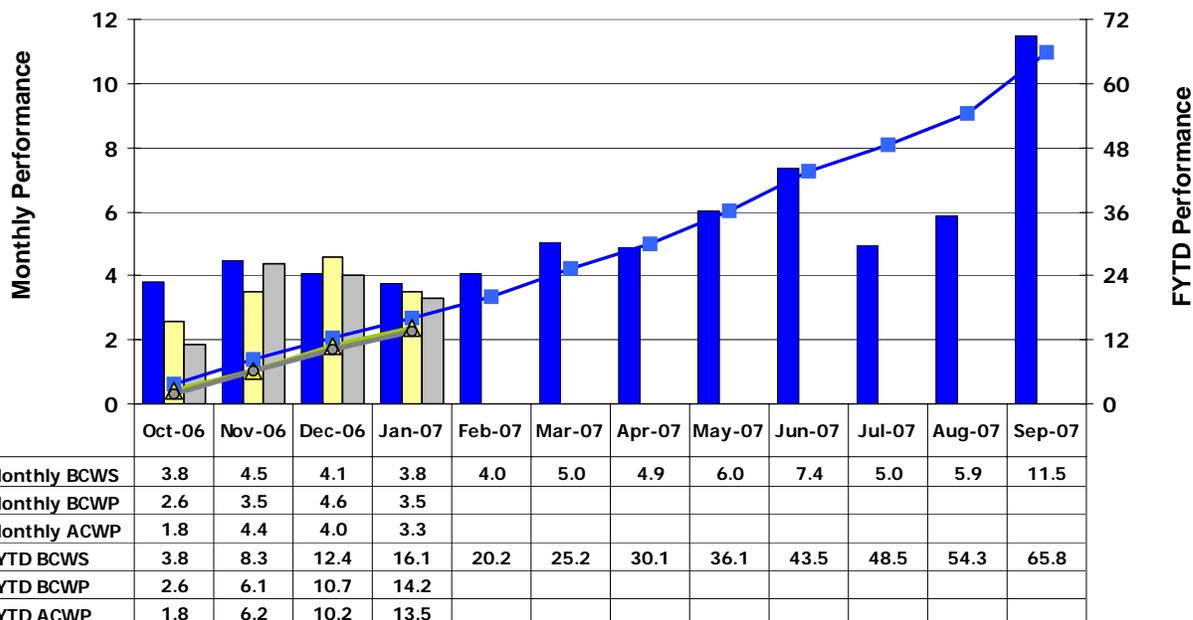
The cost variance (CV) for CP D&D (\$0.4M) is within established thresholds.

The favorable CV for Waste Sites (+\$0.5M) is due to drilling progress at the A-4 borehole.

The unfavorable CV for Reliability Projects (-\$0.2M) is within established thresholds.

## FY 2007 Schedule/Cost Performance (\$M), continued

### Performance Analysis FYTD and Monthly (\$M)



## Milestones/Performance Objectives Achievement

PBS	MSN	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	M-015-45A	Submit 200-PW-1 OU Remedial Investigation Report	HQ	10/31/06	9/28/06		Completed ahead of schedule
RL-0040	M-091-40L-012	Quarterly Burial Ground vent/substrate sampling results (1st Qtr 2007)	HQ	12/1/06	11/1/06		Completed ahead of schedule
RL-0040	M-091-40L-013	Quarterly Burial Ground vent/substrate sampling results (2nd Qtr 2007)	HQ	3/15/07			On schedule
RL-0040	M-015-46B	Chemical Laboratory Waste OUs Feasibility Study	HQ	3/31/07		12/31/11	Behind schedule. M-15 tentative agreement changes date to 2011.
RL-0040	RL40.3a CPDD-07-011	Project Execution Plan reflective of an integrated groundwater source approach	RL	3/31/07			On schedule
RL-0040	RL40.2a CPDD-07-009	Draft "A" Excavation Treatability Test plan (including SAP) for the 200 Area BC Cribs and Trenches	RL	5/31/07			On schedule
RL-0040	M-091-40L-014	Quarterly Burial Ground vent/substrate sampling results (3rd Qtr 2007)	HQ	6/15/07			On schedule

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## Milestones/Performance Objectives Achievement, continued

PBS	MSN	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	MR.RL40.9c CPDD-07-001	Safety basis document defining appropriate controls to allow disposition of U Plant Cell 30 tank contents	RL	6/30/07			On schedule
RL-0040	MR.RL40.11 CPDD-07-002	Ten High Risk Industrial Facilities Demolished to Slab on Grade	RL	6/30/07	2/12/07		Completed ahead of schedule
RL-0040	MR.RL40.9a CPDD-07-003	U Plant Canyon Facility Waste Acceptance Study	RL	6/30/07			On schedule
RL-0040	MR.RL40.12 CPDD-07-004	212-N nuclear facility hazard reduction and downgrade completed	RL	6/30/07		TBD	Forecast behind schedule - evaluating path forward
RL-0040	MR.RL40.9b D&D-07-001	U Plant Accelerated Closure Engineering Studies		6/30/07			On schedule
RL-0040	MR.RL40.10 CPDD-07-005	Three 200-CW-3, 200 North Cooling Water Group, waste sites remediated under the remove, treat, and dispose alternative	RL	7/31/07			On schedule
RL-0040	M-091-40L-015	M-91-40L.4C Quarterly Burial Ground vent/substrate sampling results (4th Qtr 2007)	HQ	8/31/07			On schedule
RL-0040	M-015-45B CPDD-07-006	Submit Draft A Feasibility Study and Proposed Plan for the 200-PW-1/3/6 Operable Unit Group.	HQ	9/30/07			On schedule
RL-0040	RL40.3b CPDD-07-007	Central Plateau Cleanup and Configuration Control Specification document	RL	9/30/07			On schedule